

We Claim:

1. A host cell producing a DNA encoding an antigen-combining protein produced by the method of:

providing DNA containing genes encoding antigen-combining proteins;  
inserting said DNA into a framework antibody vector; and  
introducing said DNA and antibody framework vector into a host cell.

2. The host cell of Claim 1, wherein the host cell is prokaryotic.

3. The host cell of Claim 1, wherein the host cell is eukaryotic.

4. The host cell of Claim 3, wherein the host cell is an immortalized cultured mammalian cell.

5. The host cell of Claim 4, wherein the immortalized cultured mammalian cell is a myeloma or plasmacytoma cell.

6. The host cell of Claim 1 wherein said DNA is introduced into the host cell by a method selected from the group consisting of: electroporation, calcium phosphate coprecipitation, protoplast fusion, viral infection, and cell fusion.

7. The host cell of Claim 1, wherein the DNA containing genes encoding antigen-combining proteins encodes an antigen-combining protein selected from the group consisting of: an immunoglobulin heavy chain variable region and an immunoglobulin light chain variable region.

8. The host cell of Claim 1, wherein the antigen-combining proteins comprise antibodies.

9. Host cells producing antibodies, produced by a method comprising:  
providing DNA comprising genes encoding antibodies;  
inserting the DNA into framework antibody vectors; and  
introducing said framework antibody vectors into host cells.

10. The host cells of Claim 9, wherein said DNA comprises a vector.

11. The host cells of Claim 10, wherein said vector is an expression vector.

12. The host cells of Claim 9, wherein the host cells are prokaryotic.

13. The host cells of Claim 9, wherein the host cells are eukaryotic.

14. The host cells of Claim 13, wherein the host cells are an immortalized cultured mammalian cell line.

15. The host cells of Claim 14, wherein the immortalized cultured mammalian cell line is a myeloma or plasmacytoma cell line.

16. The host cells of Claim 9, wherein said DNA is introduced into the host cells by a method selected from the group consisting of: electroporation, calcium phosphate coprecipitation, protoplast fusion, viral infection, and cell fusion.

17. The host cells of Claim 9, wherein the DNA containing genes encoding antibodies encodes immunoglobulin heavy chain variable regions or immunoglobulin light chain variable regions.